FACT SHEET

as required by LAC 33:IX.2411, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0041262; AI 19596; PER20060001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

I. **THE APPLICANT IS:** City of Gretna
City of Gretna Wastewater Treatment Plant
1101 Burmaster Street
Gretna, Louisiana 70053

II. **PREPARED BY:** Todd Franklin

DATE PREPARED: March 21, 2007

III. **PERMIT ACTION:** reissue LPDES permit LA0051262, AI 19596; PER20060001

LPDES application received: October 30, 2006

EPA has not retained enforcement authority.

Previous LPDES permit effective: June 1, 2002
Previous LPDES permit expires: May 31, 2007

IV. **FACILITY INFORMATION:**

A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the City of Gretna.

B. The permit application does not indicate the receipt of industrial wastewater.

C. The facility is located at 1101 Burmaster Street in Gretna, Jefferson Parish.

D. The treatment facility consists of primary sedimentation using clarifiers, followed by biological treatment using trickling filters, followed by secondary sedimentation using clarifiers. Disinfection is by chlorination.

E. Outfall 001

Discharge Location:	Latitude 29° 57′ 20″ North Longitude 90° 2′ 41″ West
Description:	treated sanitary wastewater
Design Capacity:	5 MGD

Type of Flow Measurement which the facility is currently using:

Combination Totalizing Meter / Continuous Recorder

V. RECEIVING WATERS:

The discharge is into the Mississippi River in Subsegment 070301 of the Mississippi River Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The **critical low flow** (7Q10) of the Mississippi River is 141,955 cfs.

The **hardness value** is 149.7 mg/l and the **fifteenth percentile value for TSS** is 25 mg/l.

The designated uses and degree of support for Subsegment 070301 of the Mississippi River Basin are as indicated in the table below[1/]:

Overall Degree of Support for Segment	Degree of Support of Each Use						
Full	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
	Full	Full	Full	N/A	Full	N/A	N/A

[1/] The designated uses and degree of support for Subsegment 070301 of the Mississippi River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 070301 of the Mississippi River Basin, is listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS) as habitat for the Pallid Sturgeon, which is listed as an endangered species. Since effluent limitations are established in the permit to ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat, LDEQ has determined that the issuance of this LPDES permit is not likely to adversely affect the Pallid sturgeon or its aquatic habitats. As instructed by the FWS in a letter dated September 29 from Watson (FWS) to Brown (LDEQ), this fact sheet has been sent to the FWS for review and consultation.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mr. Todd Franklin
Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Subsegment 070301, Mississippi River-from Monte Sano Bayou to Head of Passes, is not listed on LDEQ's Final 2004 303(d) List as impaired, and to date no TMDL's have been established. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by any future TMDLs.

Final Effluent Limits:

OUTFALL 001

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD_5	1,251	30 mg/l	45 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy (SSELP) for facilities of this treatment type and size which discharge into the Mississippi River.
TSS	1,251	30 mg/l	45 mg/l	

Other Effluent Limitations:

1) **Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) **pH**

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C, the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) **Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

Toxicity Characteristics

In accordance with EPA's Region 6 Post-Third Round Toxics Strategy, permits issued to treatment works treating domestic wastewater with a flow (design or expected) greater than or equal to 1 MGD shall require biomonitoring at some frequency for the life of the permit or where available data show reasonable potential to cause lethality, the permit shall require a whole effluent toxicity (WET) limit (*Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards*, September 27, 2001 VERSION 4).

Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates the effects of synergism of the effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity. LAC 33:IX.1121.B.3. provides for the use of biomonitoring to monitor the effluent for protection of State waters. The biomonitoring procedures stipulated as a condition of this permit are as follows:

The permittee shall submit the results of any biomonitoring testings performed in accordance with the LPDES Permit No. LA0041262, **Biomonitoring Section** for the organisms indicated below.

TOXICITY TESTS	FREQUENCY
48 Hour Definitive Toxicity Test using Daphnia pulex	1/year
48 Hour Definitive Toxicity Test using fathead minnow (Pimephales promelas)	1/year

Dilution Series - The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional concentrations shall be 0.07%, 0.09%, 0.12%, 0.16%, and 0.22%. The low-flow effluent concentration (critical low-flow dilution) is defined as 0.16% effluent. The critical dilution is calculated in Appendix B-1 of this fact sheet. According to the Implementation of State Standards, acute toxicity testing in addition to, or in lieu of, chronic toxicity testing may be imposed for discharges that have a critical dilution of five percent (5%) or less. An acute to chronic ratio has been applied in the calculations. Results of all dilutions shall be documented in a full report according to the test method publication mentioned in the **Biomonitoring Section** under Whole Effluent Toxicity. This full report shall be submitted to the Office of Environmental Compliance as contained in the Reporting Paragraph located in the **Biomonitoring Section** of the permit.

The permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body. Modification or revocation of the permit is subject to the provisions of LAC 33:IX.2383. Accelerated or intensified toxicity testing may be required in accordance with Section 308 of the Clean Water Act.

Toxic Substances

Due to drinking water supply being a designated use, the permittee shall analyze the final effluent for the presence of the following toxic substances. The MQL is intended as action levels. Should a toxic substance exceed the MQL, the permittee shall determine the source of the substance and take whatever measures necessary to secure abatement in order to protect all drinking water sources downstream of the discharge. The LDEQ Regional Office and all drinking water intakes within five (5) miles downstream of this discharge shall be notified upon detection of any toxic substance above the MQL. Records of any actions taken shall be made available upon request by any duly authorized regional inspectors and/or LDEQ Headquarter representatives.

A report containing the results of the lab analysis indicating if any toxic substances have exceeded the MQL including a brief summary of any abatement taken at the time, must be submitted to this Office within 20 days of completion of the analysis. **The first analysis shall be performed within one year following the effective date of the permit, and annually thereafter, by a 24-hour composite sample type.**

Reports must be submitted to the following address:

Department of Environmental Quality
Office of Environmental Compliance
Enforcement Division
Post Office Box 4312
Baton Rouge, Louisiana 70821-4312

TOXIC SUBSTANCES

TOXIC SUBSTANCES (CAS NO.)	Required MQL (µg/l)	EPA Test Method
VOLATILE ORGANIC CHEMICALS		
Acrolein (107-02-8)	50	624
acrylonitrile (107-13-1)	50	624
benzene (71-43-2)	10	624
bromodichloromethane (dichlorobromomethane)	10	624

(75-27-4)		
bromoform (tribromomethane) (75-25-2)	10	624
carbon tetrachloride (56-23-5)	10	624
chlorobenzene (108-90-7)	10	624
chloroform (trichloromethane)	10	624
chloromethane (methyl chloride) (74-87-3)	50	624
1,1-dichloroethane (75-34-3)	10	624
1,2-dichloroethane (107-06-2)	10	624
1,1-dichloroethylene (75-35-4)	10	624
dichloromethane (methylene chloride) (75-09-2)	20	624
cis-1,3-dichloropropene	10	624
trans-1,3-dichloropropene	10	624
ethylbenzene (100-41-4)	10	624
para-dichlorobenzene*	---	---
1,1,2,2-tetrachloroethane (79-34-5)	10	624
tetrachloroethylene (127-18-4)	10	624
toluene (108-88-3)	10	624
1,1,1-trichloroethane (71-55-6)	10	624
1,1,2-trichloroethane (79-00-5)	10	624
trichloroethylene (79-01-6)	10	624
vinyl chloride (chloroethylene) (75-01-4)	10	624
ACID EXTRACTABLE ORGANIC CHEMICALS		
2-chlorophenol (95-57-8)	10	625
3-chlorophenol	10	625
4-chlorophenol	10	625
2,4-dichlorophenol (120-83-2)	10	625
2,3-dichlorophenol	10	625
2,5-dichlorophenol	10	625
2,6-dichlorophenol	10	625
3,4-dichlorophenol	10	625
2,4-dinitrophenol (51-28-5)	50	625
pentachlorophenol (87-86-5)	50	625
phenol (108-95-2)	10	625
2,4,6-trichlorophenol (88-06-2)	10	625
BASE/NEUTRAL EXTRACTABLE ORGANIC CHEMICALS		
anthracene (120-12-7)	10	625
benzidine (92-87-5)	50	625
bis(2-chloroethyl)ether (111-44-4)	10	625
bis(2-chloro-1-methylethyl)ether (39638-32-9)	10	625
bis(2-ethylhexyl)phthalate (117-81-7)	10	625

di-n-butyl phthalate (84-74-3)	10	625
1,3-dichlorobenzene (541-73-1)	10	625
1,2-dichlorobenzene (95-50-1)	10	625
1,4-dichlorobenzene (106-46-7)	10	625
3,3-dichlorobenzidine (91-94-1)	50	625
diethyl phthalate (84-66-2)	10	625
dimethyl phthalate (131-11-3)	10	625
2,4-dinitrotoluene (121-14-2)	10	625
1,2-diphenylhydrazine (122-66-7)	20	625
fluoranthene (206-44-0)	10	625
hexachlorobenzene (118-07-1)	10	625
hexachlorobutadiene (87-68-3)	10	625
hexachlorocyclopentadiene (77-47-4)	10	625
hexachloroethane (67-72-1)	20	625
isophorone (78-59-1)	10	625
nitrobenzene (98-95-3)	10	625
N-nitrosodimethylamine (62-75-9)	50	625
N-nitrosodiphenylamine (86-30-6)	20	625
PESTICIDES & PCBs		
aldrin (309-00-2)	0.05	608
PCB's (Total)	1.0	608
gamma-BHC (Lindane, Hexachlorocyclohexane) (58-89-9)	0.05	608
chlordane (57-74-9)	0.2	608
4,4"DDD (TDE) (72-54-8)	0.1	608
4,4"DDE (72-55-9)	0.1	608
4,4"DDT (50-29-3)	0.1	608
Dieldrin (60-57-1)	0.1	608
endosulfan I (alpha) (115-29-7)	0.1	608
endosulfan II (beta) (115-29-7)	0.1	608
endrin (72-20-8)	0.1	608
heptachlor (76-44-8)	0.05	608
methoxychlor*		---
2,3,7,8-tetrachlorodibenzo-p-dioxin (1764-01-6)	**	625
toxaphene (8001-35-2)	5.0	608
2,4-dichlorophenoxyacetic acid (2,4-D) (94-75-7)	10	509B
2-(2,4,5-trichlorophenoxy)proprionic acid	4	509B
METALS		

antimony (7440-36-0)	60	200.7
arsenic (7440-38-2)	10	206.2
barium*		---
beryllium (7440-41-7)	5	200.7
cadmium (7440-43-9)	1	213.2
chromium III (16065-83-1)	10	200.7
chromium VI (7440-47-3)	10	200.7
copper (7550-50-8)	10	220.2
lead (7439-92-1)	5	239.2
flouride*		---
mercury (7439-97-6)	0.2	245.1
nickel (7440-02-0)	40	200.7
nitrate (as N)*		---
selenium (7782-49-2)	5	270.2
silver (7440-22-4)	2	272.2
thallium (7440-28-0)	10	279.2
zinc (7440-66-6)	20	200.7
MISCELLANEOUS		
cyanide	20	335.2
total phenols	5	420.1

* In addition to the effluent lab result for this pollutant, also report MQL and Test Method used.

** Method 625 is a nonquantitative screen that is used to ascertain a positive or negative result. With proper QA/QC techniques, a positive result can be expected at a level above 1 ppm. If this test yields a positive response, then Method 613 would be appropriate to establish the quantitative value. Method 613 requires use of the dioxin standard which is dangerous and should not be used unnecessarily.

X. PREVIOUS PERMITS:

LPDES Permit No. LA0041262: Effective: June 1, 2002
Expired: May 31, 2007

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Monthly Avg.	Weekly Avg.	Measurement Frequency	Sample Type
Flow	Report	Report	Continuous	Recorder
BOD_5	30 mg/l	45 mg/l	5/week	12 Hour Composite
TSS	30 mg/l	45 mg/l	5/week	12 Hour Composite
Phosphorus	Report mg/l	Report mg/l	1/quarter	Grab
TKN	Report mg/l	Report mg/l	1/quarter	Grab
Toxic Substances	---	---	1/year	24 Hour Composite
Fecal Coliform Colonies/100 ml	200	400	5/week	Grab

pH	Range (6.0 su – 9.0 su)		5/week	Grab
Biomonitoring				
Pimephales promelas	Report	Report	1/year	24 Hour Comp.
Daphnia pulex	Report	Report	1/year	24 Hour Comp.

The permit contains biomonitoring.
The permit contains pollution prevention language.

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:

A) Inspections

A review of the files indicates the following most recent inspection performed for this facility.

Date – March 24, 2005
Inspector - LDEQ
Findings and/or Violations –

1. Grit cleaner was out of service. Headworks is not fully functioning, allowing solid waste to enter primary clarifier. Bids for new headworks are currently being accepted.
2. The facility reported a pH excursion for September 2004. The pH was below 6 for two days due to operator error.
3. All effluent samples are now analyzed by Acculab. The site ceased its in-house analysis in September 2004.
4. I&I problems/overflows were noted in previous inspections. No overflows were noted since the last inspection, but some I&I problems still exist.

Date – August 16, 2005
Inspector - LDEQ
Findings and/or Violations –

- A contractor broke a sewage line by driving a piling through it, releasing 50,000 gallons of treated wastewater into a manhole. The treated wastewater flowed back into the sewage treatment plant. A temporary repair was made on August 16, 2005, and a permanent repair was made August 22, 2005.

A Hurricane Impact Damage Audit was submitted to the Department and stated that the facility has returned to pre-hurricane operational status.

B) Compliance and/or Administrative Orders

A review of the files indicates the following most recent enforcement actions administered against this facility:

LDEQ Issuance:

Administrative Order
Docket Number CWA-06-2006-2150
Date Issued – September 21, 2006

Findings of Fact:

- A review of the EPA official files and records established that the Permittee did not submit an annual sludge monitoring report for calendar year 2005, which the Permittee was required to submit to EPA by February 19, 2006.

Order:

- Within 30 days of the effective date of the Order, the Permittee shall submit a completed annual sludge monitoring report for sludge operations during calendar year 2005.

C) DMR Review

A review of the discharge monitoring reports for the period beginning August 2004 through October 2006 has revealed the following violation:

Parameter	Outfall	Period of Excursion	Permit Limit	Reported Quantity
pH (minimum)	001	September 2004	6.0 su	4.05 su

XII. ADDITIONAL INFORMATION:

LDEQ reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future. Additional limitations and/or restrictions are based upon water quality studies and can indicate the need for advanced wastewater treatment. Water quality studies of similar dischargers and receiving water bodies have resulted in monthly average effluent limitations of 5mg/L $CBOD_5$ and 2 mg/L NH_3-N. Prior to upgrading or expanding this facility, the permittee should contact LDEQ to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

The nearest drinking water intake is located approximately 9 river miles downstream from the discharge point(s). Nearby potable water industrial intakes include Domino Sugar Corp. and Calciner Industries. As per the 2004 305(b) Report, in 2002, 3,997 samples were collected and analyzed for the 26 (problematic organic) compounds. Of the samples analyzed no compounds were detected.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 5 MGD.

Effluent loadings are calculated using the following example:

BOD_5: 8.34 gal/lb x 5 MGD x 30 mg/l = 1,251 lbs/day

At present, the Monitoring Requirements, Sample Types, and Frequency of Sampling as shown in the permit are standard for facilities of flows between 5 MGD and 10 MGD.

Effluent Characteristics	Monitoring Requirements	
	Measurement Frequency	Sample Type
Flow	Continuous	Recorder
BOD_5	5/week	12 Hr. Composite

Total Suspended Solids		5/week	12 Hr. Composite
Fecal Coliform Bacteria		5/week	Grab
pH		5/week	Grab
Biomonitoring	Daphnia pulex	1/year	24 Hr. Composite
	Pimephales promelas	1/year	24 Hr. Composite
Toxic Substances		1/year	24 Hr. Composite

Pretreatment Requirements

Based upon consultation with LDEQ pretreatment personnel, general pretreatment language will be used due to the lack of either an approved or required pretreatment program.

Pollution Prevention Requirements

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

XIII TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

XIV REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards", Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program", Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, City of Gretna, City of Gretna Wastewater Treatment Plant, October 30, 2006.